#### FPT INDUSTRIAL S.p.A.

EXECUTIVE ORDER U-R-015-0350 New Off-Road Compression-Ignition Engines Page 1 of 2 pages

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)			
2017	HFPXL06.7SDA	4.5, 6.7	Diesel	8000			
	FEATURES & EMISSION O		TYPICAL EQUIPMENT APPLICATION				
Electron Turbock Catalyst, S	nic Direct Injection, Engin harger, Charge Air Coole Selective Catalytic Reduct Oxidation Cataly	r, Diesel Oxidation tion - Urea, Ammonia	Tractor, Generator Set, and Other	Industrial Equipment			

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED EMISSION			。 EX	HAUST (g/kw-h	OPACITY (%)					
POWER	STANDARD CATEGORY		ИМНС	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
75 ≤ kW ≤ 560	Tier 4 Final	OPTIONAL STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.01	0.34		0.04	0.02			

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has complied with the more stringent set of standards from the various power categories in conformance with Section 1039.230 (e) of the "California Exhaust Emission Standards and Test Procedures for 2008 and Later Tier 4 Off-Road Compression-Ignition Engines, Part I-D" adopted October 20, 2005 and last amended October 25, 2012.

**BE IT FURTHER RESOLVED:** That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

BE IT FURTHER RESOLVED: That the listed engine family is conditionally certified pending submission of additional test data to verify compliance with useful-life emission standards. The manufacturer has until October 15, 2017 to provide test data to confirm or correct the certification emissions levels on this conditional certification. Failure to resolve concerns by the specified date, shall be cause for the Executive Officer to rescind this conditional certification, in which case all engines covered under this conditional certification would be deemed uncertified pursuant to Health and Safety Code Section 43153 and subject to civil penalties pursuant to Health and Safety Code Section 43154.

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Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this \_\_\_\_\_\_ day of March 2017.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

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# **Engine Model Summary Template**

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: ministrate @ peak HP (for desail only)	5,Fuel Rate: (befu) @ peak HP (for desels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/etrake@peak torque	8.Fuel Rate: (baftr)@peak torque	9.Emission Control Device Per SAE J1930	30-17
F4HFE613R*B	F4HFE613R*B	245 @ 2000	130	N/A	963 @ 1300	188	N/A	DDI ECM TC CAC DOC SCR-u AMOX	
F4HFE613X°B	F4HFE613X°B	226 @ 2000	111	N/A	742 @ 1500	135	N/A	DDI ECNI TO CAC DOC BCR-4 AMOR	1 /
F4HFE613S*B	F4HFE613S*B	226 @ 2000	116	N/A	877 👩 1300	162	N/A	DDI ECM TO CAC DOC BOR-4 AMOR	
F4HFE613J*B	F4HFE613J*B	221 @ 2200	106	N/A	787 @ 1500	144	N/A	DDI ECM TC CAC DOC SCR-4 AMOX	
F4DFE613J*B	F4DFE613J*B	221 @ 2200	106	N/A	767 @ 1500	144	N/A	DDI ECM TC CAC DOC SCR-4 AMOX	
F4HFE613G*B	F4HFE613G*B	210 @ 2200	102	N/A	678 @ 1600	127	N/A	DDI ECM TC CAC DOC SCR-4 AMOX	
F4HFE613K*B	F4HFE613K*B	202 @ 2200	97	N/A	696 @ 1500	129	N/A	DDI ECM TC CAC DOC SCR-11 AMOK	
F4DFE613K*B	F4DFE613K*B	202 @ 2200	97	N/A	696 @ 1500	129	N/A	DDI ECM TC CAC DOC SCR-4 AMOX	
F4DFE613M*B	F4DFE613M*B	188 @ 2200	94	N/A	648 @ 1500	122	N/A	DDI ECM TC CAC DOC BCR-u AMOX	
F4HFE613D*B	F4HFE613D*B	235 @ 2100	115	N/A	781 @ 1500	144	N/A	DDI ECM TC CAC DOC SCR-4 AMOX	
F4HFE613B*B	F4HFE613B*B	256 @ 2200	118	N/A	859 <b>@</b> 1500	157	N/A	DDI ECRI TO CAC DOC BOR-4 AMOX	
F4DFE613B*B	F4DFE613B*B	258 @ 2200	116	N/A	859 @ 1500	157	N/A	DDI ECNI TO CAC DOC SCR-4 AMIOX	
F4HFE613E*B	F4HFE613E*B	268 @ 2100	130	N/A	887@ 1800	163	N/A	DDI ECNI TO CAC DOC SCR-4 AMOX	
F4HFE613C*B	F4HFE613C*B	275 @ 2100	133	N/A	881 @1800	164	N/A	DDI ECNI TO CAC DOC BCR-4 AMOK	
F4DFE613H*B	F4DFE613H*B	236 @ 2200	108	N/A	815 @ 1500	148	N/A	DDI ECNI TO CAC DOC BOR-11 AMOX	
F4HFE613H"B	F4DHE613H*B	236 @ 2200	106	N/A	815 @ 1500	148	N/A	DDI ECNITO GAC DOC BCR-4 AMOK	
F4HFE813F*B	F4HFE613F*B	284 @ 2200	131	N/A	859 @ 1500	155	N/A	DDI ECM TC GAC DOC SCR-4 AMOX	
F4HFE613A*B	F4HFE613A*B	251 @ 2200	115	N/A	789 @ 1600	143	N/A	DDI ECM TC CAC DOC SCR-u AMOX	
F4HFE613U*B	F4HFE613U*B	251 @ 2200	118	N/A	859 @ 1500	157	N/A	DDI ECNI TO CAC DOC BOR-14 AMOX	
F4HFE6131*B	F4HFE6131*B	281 @ 2200	130	N/A	852 @ 1500	154	NA	DDI ECN TO CAC DOC BCR-4 AMOX	
F4HFE6134°B	F4HFE6134*B	295 @ 2200	139	N/A	881 @ 1700	163	N/A	DDI ECNTO CAC DOC SCR-u AMOK	
F4HFE413V*B	F4HFE413VB	173 @ 2100	129	N/A	528 @ 1500	148	N/A	DDI ECNI TO CAC DOC SCR-11 AMOK	
F4HFE413WB	F4HFE413WB	162 @ 2100	120	N/A	519 @ 1500	146	N/A	DDI ECNI TO CAC DOC SCR-11 AMOK	
F4HFE413H*B	F4HFE413H*B	150 @ 2200	111	N/A	489 @ 1600	137	N/A	DDI ECM TC CAC DOC SCR-4 AMOX	
F4DFE413H*B	F4DFE413H*B	150 @ 2200	111	N/A	489 @ 1600	137	N/A	DDI ECM TC CAC DOC SCR-4 AMOX	" "
F4HFE4134°B	F4HFE4134*B	129 @ 2200	91	N/A	437 @ 1500	124	N/A	DDI ECM TC CAC DOC SCR-4 AMOK	
F4DFE4134°B	F4DFE4134°B	129 @ 2200	91	N/A	437 @ 1500	124	N/A	DDI ECNI TO CAC DOC SCR-4 AMOR	
	F4HFE613R*B F4HFE613X*B F4HFE613X*B F4HFE613X*B F4HFE613X*B F4HFE613C*B F4HFE613M*B F4HFE613M*B F4HFE613B*B F4HFE613B*B F4HFE613E*B F4HFE613C*B F4HFE613A*B F4HFE613A*B F4HFE613A*B F4HFE613A*B F4HFE613X*B F4HFE613A*B	F4HFE613X*B F4HFE613X*B F4HFE613X*B F4HFE613X*B F4HFE613S*B F4HFE613S*B F4HFE613J*B F4HFE613J*B F4HFE613J*B F4HFE613J*B F4HFE613G*B F4HFE613G*B F4HFE613K*B F4HFE613K*B F4DFE613K*B F4DFE613K*B F4DFE613M*B F4DFE613M*B F4HFE613D*B F4HFE613D*B F4HFE613B*B F4HFE613B*B F4HFE613B*B F4HFE613E*B F4HFE613C*B F4HFE613C*B F4HFE613H*B F4DFE613H*B F4HFE613H*B F4HFE613F*B F4HFE613H*B F4HFE613C*B F4HFE613H*B F4HFE613C*B F4HFE613H*B F4HFE613H*B F4HFE613H*B F4HFE613C*B F4HFE613H*B F4HFE613C*B F4HFE613H*B F4HFE613C*B F4HFE613H*B F4HFE613C*B F4HFE613H*B F4HFE613C*B F4HFE613H*B F4HFE613H*B F4HFE613H*B F4HFE613H*B F4HFE613H*B F4HFE613H*B F4HFE613A*B F4HFE613H*B F4HFE613A*B F4HFE613A*B F4HFE613A*B F4HFE613A*B F4HFE613A*B F4HFE613A*B F4HFE613H*B F4HFE613A*B F4HFE613A*B F4HFE613A*B F4HFE613A*B F4HFE613A*B F4HFE613A*B	1.Engine Cotle 2.Engine Model (SAE Gross) F4HFE613R*B F4HFE613R*B 245 @ 2000 F4HFE613X*B F4HFE613X*B 226 @ 2000 F4HFE613S*B F4HFE613S*B 226 @ 2000 F4HFE613J*B F4HFE613J*B 221 @ 2200 F4DFE613J*B F4HFE613J*B 221 @ 2200 F4HFE613G*B F4HFE613G*B 210 @ 2200 F4HFE613K*B F4HFE613K*B 202 @ 2200 F4DFE613K*B F4HFE613K*B 202 @ 2200 F4DFE613M*B F4DFE613M*B 186 @ 2200 F4HFE613B*B F4HFE613B*B 256 @ 2200 F4HFE613H*B F4HFE613B*B 236 @ 2200 F4HFE613H*B F4HFE613B*B 236 @ 2200 F4HFE613H*B F4HFE613H*B 236 @ 2200 F4HFE613H*B F4HFE613H*B 236 @ 2200 F4HFE613H*B F4HFE613H*B 251 @ 2200 F4HFE613H*B F4HFE613H*B 255 @ 2200 F4HFE613H*B F4HFE613H*B 150 @ 2200 F4HFE413H*B F4HFE413H*B 150 @ 2200	1.Engine Code 2.Engine Model (SAE Gross) (tor deesd only)  F4HFE613R*B F4HFE613R*B 245 @ 2000 130  F4HFE613X*B F4HFE613X*B 226 @ 2000 111  F4HFE613S*B F4HFE613S*B 226 @ 2000 116  F4HFE613J*B F4HFE613S*B 221 @ 2200 106  F4DFE613J*B F4HFE613J*B 221 @ 2200 108  F4HFE613G*B F4HFE613G*B 210 @ 2200 102  F4HFE613K*B F4HFE613K*B 202 @ 2200 97  F4DFE613K*B F4DFE613K*B 202 @ 2200 97  F4DFE613M*B F4DFE613M*B 188 @ 2200 97  F4HFE613D*B F4HFE613D*B 235 @ 2100 115  F4HFE613D*B F4HFE613B*B 256 @ 2200 118  F4HFE613B*B F4HFE613B*B 256 @ 2200 118  F4HFE613C*B F4HFE613C*B 275 @ 2100 130  F4HFE613C*B F4HFE613C*B 275 @ 2100 133  F4DFE613H*B F4DFE613H*B 236 @ 2200 106  F4HFE613C*B F4HFE613C*B 275 @ 2100 133  F4HFE613C*B F4HFE613C*B 275 @ 2100 133  F4HFE613C*B F4HFE613C*B 236 @ 2200 106  F4HFE613H*B F4DFE613H*B 236 @ 2200 106  F4HFE613C*B F4HFE613C*B 275 @ 2100 131  F4HFE613C*B F4HFE613C*B 275 @ 2200 131  F4HFE613C*B F4HFE613C*B 236 @ 2200 106  F4HFE613C*B F4HFE613C*B 236 @ 2200 131  F4HFE613C*B F4HFE613C*B 236 @ 2200 130  F4HFE613C*B F4HFE613C*B 236 @ 2200 130  F4HFE613C*B F4HFE613C*B 251 @ 2200 130  F4HFE613C*B F4HFE613C*B 251 @ 2200 130  F4HFE613C*B F4HFE613C*B 250 0 2200 130  F4HFE613C*B F4HFE613C*B 173 0 2100 120  F4HFE613C*B F4HFE613C*B 150 0 2200 111  F4HFE613C*B F4HFE613C*B 120 0 2200 111  F4HFE613C*B F4HFE613C*B 120 0 2200 111	1.Engine Code 2.Engine Model (SAE Gross)	1.Engine Code 2.Engine Model (SAE Gross)   Manufactoria (Dentify (	See Gross	Engine Code   2.Engine Model   3.8HP@RPM   (bordest) only)	Engine Code   2_Engine Mode   SAF Grows   Serve (Serve)   SAF Grows   SAF Gr

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## **Engine Model Summary Template**

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4,Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (the/hr) @ peak HP (for diesets only)	6.Torque @ RPM (SEA Gross)	7,Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (tbe/hr)@peak torqueD	9.Emission Control evice Per SAE J1930
HFPXL06.7SDA	F4HFE4133°B	F4HFE4133*B	138 @ 2200	98	N/A	471 <b>@</b> 1500	132	N/A	DDI ECIA TO CAC DOC SCR-u AMOX
HFPXL06.7SDA	F4DFE4133*B	F4DFE4133°B	138 @ 2200	98	N/A	471 @ 1500	132	NA	DDI ECM TC GAC DOC SCR-u AMOX
HFPXL08.7SDA	F4HFE4131°B	F4HFE4131*B	158 @ 2200	112	N/A	519 @ 1500	145	N/A	DDI EGN TO CAC DOC 8CR-u AMOX
HFPXL06.7SDA	F4DFE4131*B	F4DFE4131°B	158 @ 2200	112	N/A	519 @ 1500	145	N/A	DDI EGNITO GAC DOC SCR-WANOX
HFPXL06.7SDA	F4HFE4132*B	F4HFE4132*B	153 @ 2200	109	N/A	519 @ 1500	145	N/A	DDI ECNI TO GAC DOC SCR-MANIOX
HFPXL06.7SDA	F4DFE4132*B	F4DFE4132*B	153 @ 2200	109	N/A	519 @ 1500	145	N/A	DDI EGNI TO GAC DOC SCR-41 AMOX
HFPXL08.7SDA	F4HFE413X*B	F4HFE413X*B	142 @ 2100	105	N/A	453 @ 1500	127	N/A	DDI ECM TC CAG DOC SCR-u AMOX
HFPXL06.7SDA	F4HFE413K*B	F4HFE413K*B	168 @ 2200	120	N/A	526 @ 1500	149	N/A	DDI ECN TC CAG DOC SCR-u AMOX
HFPXL06,7SDA	F4DFE413K°B	F4DFE413K*B	168 @ 2200	120	N/A	526 @ 1500	149	N/A	DDI ECNI TO CAC DOC SCR-u AMOX
HFPXL06.7SDA	F4HFE6136*B	F4HFE6136*B	176 @ 2200	83	N/A	616 @ 1500	114	NA	DDI EGN TO CAC DOC SCR-u AMOX
HFPXL06,78DA	F4DFE6136*B	F4DFE6136*B	176 @ 2200	83	N/A	616 @ 1500	114	N/A	DDI ECIN TO CAC DOC SCR-WANKOX
HFPXL08.7SDA	F4HFE6137*B	F4HFE6137*B	208 @ 2100	100	N/A	685 <b>@</b> 1500	125	N/A	DDI ECM TC CAC DOC 8CR-4 AMOX
HFPXL06.78DA	F4DFE414B°B	F4DFE4148*B	133 @ 2200	97	N/A	448 @ 1500	127	N/A	DDR ECIA TO CAG DOC SCR-4 AMOX
HFPXL06.7SDA	F4DFE414C*B	F4DFE414C*B	123 @ 2200	90	N/A	415 @ 1500	118	N/A	DDI ECM TC CAC DOC SCR-u AMOX
HFPXL08.7SDA	F4DFE414D*B	F4DFE414D*B	114 @ 2200	85	N/A	391 @ 1500	111	N/A	DDI EGN TC CAG DOC SCR-u ANOX
HFPXL08.7SDA	F4DFE414E*B	F4DFE414E*B	143 @ 2200	101	N/A	481 @ 1500	132	N/A	DDI ECM TC CAG DOC SCR-11 AMOX
HFPXL08.7SDA	F4DFE617L*B	F4DFE617L*B	296 @ 2100	142	N/A	950 @ 1400	179	N/A	DDI ECIN TO CAC DOC SCR-u AMOX
HFPXL06.7SDA	F4DFE617M*B	F4DFE617M*B	287 @ 2100	128	N/A	884 @ 1400	167	N/A	DDI ECNITO GAG DOC SCR-4 AMOX
HFPXL06.7SDA	F4HFE613M*B	F4HFE613M*B	188 @ 2200	94	N/A	648 @ 1500	122	N/A	DOLECTO TO CAC DOC SCR-WARROX
HFPXL06.7SDA	F4HFE815B*B	F4HFE615B*B	194 @ 1800	99	N/A	570 @ 1500	99	N/A	DDI ECRI TO CAC DOC SCR-W AMOX
HFPXL06.78DA	F4HFE815C*B	F4HFE615C*B	224 @ 1800	114	N/A	656 <b>@</b> 1500	114	N/A	DDI ECM TC CAC DOC SCR-u AMOX
HFPXL06.7SDA	F4HFE615D°B	F4HFE615D*B	261 @ 1800	130	N/A	787 @ 1500	130	N/A	DDI ECM TC CAC DOC 8CR-4 AMOX
HFPXL08.7SDA	F4HFE615E*B	F4HFE615E*B	299 @ 1800	150	N/A	876 @ 1500	150	N/A	DDI ECNI TO CAC DOC SCR-u AMOX
HFPXL06.7SDA	F4HFE617M*B	F4HFE617M*B	267 <b>@</b> 2100	128	N/A	884 @ 1400	167	N/A	DDI ECRI TO CAC DOC SCR-u AMOX
HFPXL08.7SDA	F4HFE617L*B	F4DFE617L°B	296 @ 2100	142	N/A	950 @ 1400	179	N/A	DDI ECIN TO CAC DOC SCR-4 AMOX
HFPXL06.7SDA	F4HFE414C*B	F4DFE414C*B	123 @ 2200	90	N/A	412 <b>@</b> 1500	118	N/A	DDI ECNI TO CAC DOC SCR-4 AMOX
HFPXL08.7SDA	F4HFE415A*B	F4HFE415A'B	169 @ 1800	141	N/A	493 @ 1800	141	N/A	DDI ECIM TC GAC DOC 8CR-1/ AMCX

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## **Engine Model Summary Template**

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (buftr) @ peak HP (for dissets only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (be/hr)@peak torque	9.Emission Control Device Per SAE J1930
HFPXL08,78DA	F4HFE6138*B	F4HFE6138*B	190 @ 2550	84	N/A	630 @ 1400	119	N/A	DDI ECM TO GAC DOC BOR-II AMOX
HFPXL06.7SDA	F4HFE614A*B	F4HFE614A*B	284 @ 2500	125	N/A	859 @ 1500	155	N/A	DOI ICON TO CAC DOC OCR-4 ANDER
HFPXL06.7SDA	F4DFE414Z*B	F4DFE414Z*B	172 @ 2200	125	N/A	519 @ 1500	145	NA	DOLECH TO GAC DOC BOR-W AMERIC
HFPXL06.7SDA	F4HFE414Z*B	F4HFE414Z*B	172 @ 2200	125	N/A	519 @ 1500	145	NA	DDI ECNI TO CAC DOC BOR-II ANIOX
HFPXL08.7SDA	F4DFE414Y*B	F4DFE414Y*B	165 @ 2200	120	NA	519 @ 1500	145	N/A	DDI ECM TO CAC DOC SCR-s AMOX
HFPXL06.7SDA	F4HFE414Y*B	F4HFE414Y*B	165 @ 2200	120	N/A	519 @ 1500	145	N/A	DDI GCM TC CAC DOC BCR-s AMERIC
HFPXL06.7SDA	F4DFE414X*B	F4DFE414X°B	151 @ 2200	112	N/A	471 @ 1500	132	N/A	DDI ECM TC CAC DOC BCR-s AMOX
HFPXLOB.7SDA	F4HFE414X°B	F4HFE414X*B	151 @ 2200	112	N/A	471 @ 1500	132	N/A	DOI ECM TO CAC DOC BOR-s AMOX
HFPXL08.7SDA	F4DFE414W*B	F4DFE414WB	142 @ 2200	106	N/A	437 @ 1500	124	N/A	DOLECH TO CAC DOC BOR-4 AMOX
HFPXL06,7SDA	F4HFE414WB	F4HFE414WB	142 @ 2200	108	NA	437 @ 1500	124	N/A	DOI ECM TO CAC DOC SCR-s AMOX
HFPXL06.7SDA	F4DFE614Z*B	F4DFE614Z*B	173 @ 2200	114	N/A	869 @ 1500	86	N/A	DDI ECM TC CAC DOC SCR-u AMOX